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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/990,074	11/21/2001	Gernot M. Hirse	22750/503	1487
26646	7590	10/22/2003	EXAMINER	
KENYON & KENYON ONE BROADWAY NEW YORK, NY 10004			COLE, LAURA C	
			ART UNIT	PAPER NUMBER
			1744	

DATE MAILED: 10/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/990,074	HIRSE, GERNOT M.
	Examiner	Art Unit
	Laura C Cole	1744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) Responsive to communication(s) filed on \_\_\_\_\_.

2a) This action is **FINAL**.      2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) Claim(s) 1 and 3-10 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) 8 and 10 is/are allowed.

6) Claim(s) 1 and 3-7 is/are rejected.

7) Claim(s) 9 and 10 is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on 11 September 2003 is: a) approved b) disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some \* c) None of:

    1. Certified copies of the priority documents have been received.

    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) Notice of References Cited (PTO-892)      4) Interview Summary (PTO-413) Paper No(s). 7.

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)      5) Notice of Informal Patent Application (PTO-152)

3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_      6) Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Objections***

1. Claims 4-7 and 9-10 are objected to because of the following informalities:

In Claim 4 it is unclear that the water drain grooves only extend a portion of the way through the carrier wing's thickness as shown by the Applicant in Figure 3.

In Claim 9 (also appearing in Claim 10) the language recited in lines 3-5 "said grooves extending between the interior surface and a point between the interior surface and an opposite mop carrier wing surface" is somewhat confusing. Does applicant intend "said grooves extending between the interior surface and a point within the thickness of the carrier piece"?

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Courtney et al., USPN 5,896,613 in view of Kieson et al., USPN 5,625,918.

Courtney et al. disclose a floor mop that comprises a mop made of an absorbent material (Figures 1-4 (28)), a mop frame including a central carrier piece (Figures 1-4 (22)), two mop carrier wings (Figures 1-4 (18) and (20)), each wing pivotably mounted by a pin (Figures 4 and 5 (24) and (26)), the carrier wings having inner surfaces which carry the mop (Column 2 Lines 48-49) and are pressed together by squeezing (Column

2 Lines 51-54), wherein one of the side edges extending from the hinge edge is slanted toward the opposite side edge (Figure 1, the one edge that is slanted toward the opposite edge would be the edge that forms a tip when it is not in the squeezing position, and the opposite edge is (92)). Further each wing forms a trapezoid with an included right angle (Figure 1, the trapezoid is formed by the hinge edge that is below the center carrier piece, the slanted edge, the opposite edge (92), and the edge (80); the right angle being formed between the hinge edge and the opposite edge (92) or between the opposite edge (92) and the edge (80)) and the larger base line of the trapezoid would be the hinge edge (Figure 1). Courtney et al. discloses that pins (24, 26) act as pivot points however do not disclose that the pins in any way serve as a "hinge."

Kieson et al. discloses a wringer mop that comprises a mop made of an absorbent material (Figures 1-3 (75)), a mop frame including a central carrier piece (Figures 3-4 (52)), two mop carrier wings (Figures 1-5 and 7; Column 4 Line 65 to Column 5 Line 2), each wing pivotably mounted by a hinge edge (Column 4 Lines 59 - 65), the carrier wings having inner surfaces which carry the mop (Column 4 Lines 27-36) and are pressed together by squeezing (Column 5 Lines 40-50, rollers wring downward on the wings), wherein one of the side edges extending from the hinge edge is slanted toward the opposite side edge (the hypotenuse of the triangle shown in Figures 1-5 and 7). The mop carrier wing forms a triangle (Figures 1-5 and 7).

It would have been obvious for one of ordinary skill in the art to modify the mounting structure of the carrier piece of Courtney et al. so that each wing is mounted

by a hinge edge of a center piece as Kieson et al. teach so to have what is known as a "living hinge" so as to manufacture the entire carrier piece assembly from one unitary piece to save on the cost and time of manufacturing. Examiner reminds Applicant that no specific hinge has been required by the claimed invention.

3. Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kieson et al., USPN 5,625,918 in view of Altrock, USPN 3,224,025.

Kieson et al. disclose all elements above, however the carrier wings are not quadrilateral shaped.

Altrock discloses a device comprising a mop made from an absorbent material (9), a mop frame including a centerpiece (4) attached to a handle (34; see Figures 1-2), two quadrilateral shaped mop carrier wings (19, 20), each wing mounted by a hinge edge (see Figure 2 edges (25,26)), the carrier wings having inner surfaces which carry the mop and can be pressed by way of squeezing (Figures 2, 5, and 6), wherein at least one of the side edges extending from the hinge edge is slanted towards the opposite side edge (Figures 1-2). Each mop carrier wing forms a trapezoid with a right angle and the larger base line forms the hinge edge (Figures 1-2). Altrock provide the teaching of providing such a shape for cleaning corners of wallboards (Column 1 Lines 40-46; Column 3 Lines 6-11).

It would have been obvious for one of ordinary skill in the art to modify the shape of the mop carrier wings of Kieson et al. for the trapezoidal quadrilateral shape that Altrock teaches to provide an ease of cleaning corners, wallboards, or other crevices.

4. Claims 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Courtney et al., USPN 5,896,613 in view of Kieson et al., USPN 5,625,918 and in further view of Tillinghast, USPN 3,271,804.

Courtney et al. and Kieson et al. disclose all elements above however do not disclose water drain grooves.

Tillinghast discloses a sponge mop and wringer that is made of an absorbent material (Figures 1, 4, and 5 (28) and (29)), a center carrier piece (Figure 4 (23)) attached to handle (Figure 1(35)), two mop carrier wings (Figures 1, 4, and 5 (21) and (22)), each wing pivotably mounted by a hinge edge (Figure 4 (23) is part of the hinge forming an edge), the carrier wings having inner surfaces that carry the mop (Column 2 Lines 2-8) and can be pressed together by way of squeezing (Figure 3.) Tillinghast does not disclose a side edge that is slanted. Tillinghast further discloses that each mop carrier wing has an interior surface having water drain grooves (Figure 1 (27); Column 1 Line 72 to Column 2 Line 2) that run toward its side edges that arranged parallel to one another (Figure 1), and run at a 180° angle to the hinge edge. The water drain grooves of Tillinghast extend *through* the carrier wing.

It would have been obvious for one of ordinary skill in the art to modify the plates of Courtney et al. and Kieson et al. to have the water drain grooves that Tillinghast teaches so as to better wring water from a sponge or absorbent material or for aesthetic purposes.

5. Claims 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kieson et al., USPN 5,625,918 in view of Altrock, USPN 3,224,025 and in further view of Tillinghast, USPN 3,271,804.

Kieson et al. and Altrock disclose all elements above however do not disclose water drain grooves. Tillinghast discloses all elements above.

It would have been obvious for one of ordinary skill in the art to modify the plates of Kieson et al. and Altrock to have the water drain grooves that Tillinghast teaches so as to better wring water from a sponge or absorbent material or for aesthetic purposes.

6. Claims 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Courtney et al., USPN 5,896,613 in view of Kieson et al., USPN 5,625,918 and in further view of Bagley, Jr., USPN 2,663,039.

Courtney et al. and Kieson et al. disclose all elements above however do not disclose water drain grooves.

Bagley, Jr. discloses a sponge mop and wringer that is made of an absorbent material (Figures 2-3 (12)), a center carrier piece (Figures 1-2 (10)) attached to handle (Figure 1 (16)), two mop carrier wings (Figures 1-3 (2) and (4)), each wing pivotably mounted by a hinge edge (Figures 1-3 (10) is part of the hinge forming an edge), the carrier wings having inner surfaces that carry the mop (Column 2 Lines 21-22) and can be pressed together by way of squeezing (Column 1 Lines 17-24.) Bagley, Jr. does not disclose a side edge that is slanted. Bagley Jr. further discloses that each mop carrier wing has an interior surface having water drain grooves (Figure 1 (14); Column 3 Lines

11-13) that run toward its side edges that arranged parallel to one another (Figure 1), and run at a 180° angle to the hinge edge.

It would have been obvious for one of ordinary skill in the art to modify the plates of Courtney et al. and Kieson et al. to have the water drain grooves that Bagley, Jr. teaches so as to better wring water from a sponge or absorbent material.

7. Claims 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kieson et al., USPN 5,625,918 in view of Altrock, USPN 3,224,025, in further view of Bagley, Jr., USPN 2,663,039.

Kieson et al. and Altrock disclose all elements above however do not disclose water drain grooves. Bagley, Jr. discloses all elements above.

It would have been obvious for one of ordinary skill in the art to modify the plates of Kieson et al. and Altrock to have the water drain grooves that Bagley, Jr. teaches so as to better wring water from a sponge or absorbent material.

#### ***Allowable Subject Matter***

8. Claims 8 and 10 are allowed.
9. Claim 9 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
10. The following is a statement of reasons for the indication of allowable subject matter:

None of the prior art made of record previous to this Office action or cited within this office action have water drain grooves extending between the interior surface and a point between the interior surface and an opposite mop carrier wing surface. Also, the art does not disclose water drain grooves that become wider toward the angled side edge.

***Applicants Arguments***

11. In the Applicants response, Paper No. 6, filed 11 September 2003, the Applicant contends that:

- A. Decoopman et al. do not disclose or suggest at least one of the two side carrier wing edges extending from the hinge edge that is slanted toward the opposite side edge.
- B. Courtney et al. do not disclose carrier wings pivotably mounted by a hinge edge of the center carrier piece attached to a handle but rather by pins 24, 26.
- C. Courtney et al. do not disclose that each mop carrier wing forms a trapezoid with an included right angle, the larger base line of which forms the hinge edge.
- D. Johnson does not disclose two quadrilateral shaped mop carrier wings.
- E. Kieson et al. do not disclose two quadrilateral shaped mop carrier wings.
- F. Neither Tillinghast nor Courtney et al. are mounted by a hinge edge of a center carrier piece.
- G. The Tillinghast slots extend all the way through plates 21, 22 do not qualify as water drain grooves in an interior surface of a plate.

H. Courtney et al. and Tillinghast does not disclose that each mop carrier wing has an interior surface having water drain grooves which run toward the side edge, that the grooves are arranged parallel, or that the grooves run at an angle to the hinge edge.

I. The Office Action depends on hindsight "that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the plates of Courtney et al. to have the water drain grooves that Tillinghast teaches so as to better wring water from a sponge or absorbent material.

J. Tillinghast plates are connected via a hinge pin and not a center piece.

K. Courtney et al. in no way suggests a motivation for each mop carrier wing to form a trapezoid with an included right angle, the larger base line of which forms the hinge edge.

L. Applicant submits that the combination of Kieson et al. and Tillinghast does not disclose the combination of two equilateral (does Applicant intend the term quadrilateral, not equilateral?) shaped mop carrier wings pivotably mounted by a hinge edge.

M. Kieson et al. and Tillinghast does not disclose that each mop carrier wing has an interior surface having water drain grooves which run toward the side edge, that the grooves are arranged parallel, or that the grooves run at an angle to the hinge edge.

N. The combination of Kieson et al. and Tillinghast does not suggest the combination of two equilateral (does Applicant intend the term quadrilateral, not equilateral?) shaped mop carrier wings mounted by a hinge edge of the center of the carrier piece.

O. Neither Bagley, Jr. nor Courtney et al. disclose carrier wings pivotably mounted by a hinge edge of the center carrier piece.

P. The combination of Courtney et al. and Bagley, Jr. do not disclose that each mop carrier wing has an interior surface having water drain grooves which run toward the side edge, tat the grooves are arranged in parallel to one another, or that the water drain grooves run at an angle to the hinge edge.

Q. The openings of Bagley, Jr. does not qualify as water drain grooves and that the openings would pass water to an exterior side of the carrier plate.

R. Kieson et al. and Tillinghast do not disclose the combination of two equilateral (does Applicant intend the term quadrilateral, not equilateral?) shaped mop carrier wings pivotably mounted by a hinge edge.

S. The combination of Kieson et al. and Bagley, Jr. does not disclose that each mop carrier wing has an interior surface having water drain grooves which run toward the slanted side edge, let alone that the water drain grooves are arranged parallel to one another, or that the water drain groove run at an angle to the hinge edge.

T. The openings of Bagley, Jr. do not qualify as water drain grooves and that the openings would pass water to an exterior side of the carrier plate.

#### ***Response to Arguments***

12. Applicant's arguments A, B, D, E, F, J, L, N, O, and R, see Paper No. 6, filed 11 September 2003, with respect to the rejection(s)of claim(s) 1-7 under Courtney et al., Kieson et al., Decoopman et al., Johnson, Tillinghast in view of Courtney et al.,

Tillinghast in view of Kieson et al., Courtney et al. in view of Tillinghast, Kieson et al. in view of Tillinghast, Courtney et al. in view of Bagley, Jr., and Kieson et al. in view of Bagley Jr. have been fully considered and are persuasive as (1) Decoopman et al., Kieson et al., Tillinghast et al., nor Bagley et al. have two quadrilateral shaped carrier wings and that (2) Tillinghast, Courtney et al., nor Bagley et al. comprise the carrier wings pivotably mounted by a hinge edge on the carrier piece. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Courtney et al. in view of Kieson et al. and in further view of Tillinghast or Bagley, Jr. or Kieson et al. in view of Altrock and in further view of Tillinghast or Bagley, Jr. (see above).

13. Applicant's arguments filed 11 September 2003 have been fully considered but they are not persuasive.

In response to Arguments C and K, Courtney et al. do in fact disclose that each mop carrier wing forms a trapezoid with an included right angle, the larger base line of which forms the hinge edge. See especially Figures 1 and 2, Figure 2 having one carrier wing showing.

In regards to arguments G, H, and M in that the Tillinghast slots do not qualify as water drain grooves in an interior surface of a plate the Examiner disagrees. The slots of Tillinghast begin in the interior and extend throughout the surface of the carrier plate. If the Applicant intends the water drain grooves to be within the interior surface and not extend through the carrier plate, it may be desired to be included within the claim. Although the claims are interpreted in light of the specification, limitations from the

specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In response to applicant's argument I, that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

In regards to arguments P, Q, S, and T in that the Bagley, Jr. slots do not qualify as water drain grooves in an interior surface of a plate the Examiner disagrees. The slots of Bagley, Jr. begin in the interior and extend throughout the surface of the carrier plate. If the Applicant intends the water drain grooves to be within the interior surface and not extend through the carrier plate, it may be desired to be included within the claim. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

### **Conclusion**

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura C Cole whose telephone number is (703) 305-7279. The examiner can normally be reached on Monday-Thursday, 7am - 4:30pm, alternating Fridays. After December 17<sup>th</sup>, the Examiner's office will be located at the new USPTO site in Alexandria, Virginia. After this projected date, you may reach Examiner Laura Cole by phone at 571-272-1272 or by fax at 571-273-1272.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Warden can be reached on (703) 308-2920 (or after December 17<sup>th</sup> may be reached at 571-272-1281). The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Lee  
LCC

14 October 2003

*Robert J. Warden, Sr.*

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